INDIANA'S EDUCATION
ROUNDTABLE 2010

Instructional Materials Analysis and Selection

Phase 3: Assessing Content Alignment to the Common Core State Standards for Mathematics

Grade 5

a project of
The Charles A. Dana Center
at the University of Texas at Austin

Instructional Materials Analysis and Selection

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Assessing Content Alignment to the Common Core State Standards for Mathematics

A project of
The Indiana Education Roundtable, The Indiana Department of Education,
and
The Charles A. Dana Center at The University of Texas at Austin

2010–2011

Instructional Materials Analysis and Selection
Assessing Content Alignment to the Common Core State Standards for Mathematics

This tool provides educators with a structured way to make informed decisions when selecting mathematics instructional materials. In particular, it can help you become more knowledgeable about the *Common Core State Standards for Mathematics* so you can select instructional materials aligned with these standards.

This resource can also be used with the Dana Center's larger 4-phase *Instructional Materials Analysis and Selection* toolset: Phase 1: *Studying the Standards*, Phase 2: *Narrowing the Field of Instructional Materials*, Phase 3: *Assessing Subject-Area Content Alignment*, and Phase 4: *Assessing Vertical Alignment of Instructional Materials*. The particular resource you hold is a phase 3 tool that has been customized for assessing the alignment of instructional materials with the *Common Core State Standards for Mathematics*. Note that in 2009, the Dana Center developed a similar tool for Indiana educators to use in analyzing the alignment of instructional materials to Indiana's *Academic Standards for Mathematics.*

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About the development of this resource

This tool*, Instructional Materials Analysis and Selection: Assessing Content Alignment to the Common Core State Standards for Mathematics*, draws on the Dana Center's nearly 20 years of experience in strengthening education and has been used extensively in Texas and, increasingly, other states, to help local school districts and schools select instructional materials aligned with their standards. Development and production of the Instructional Materials Analysis toolset was supported by the Charles A. Dana Center.

This resource consists of a set of 15 individual grade-level / course documents that span kindergarten through the third year of high school mathematics. There is a document for each grade from kindergarten through 8, and six documents for high school mathematics (one each for the three courses in the traditional high school pathway Algebra I, Geometry, Algebra II; and one each for the three courses in the integrated high school pathway Mathematics I, Mathematics II, and Mathematics III).[*] At the request of various states and other entities, the Dana Center has populated this *Instructional Materials Analysis and Selection* tool with standards from the *Common Core State Standards for Mathematics* for use by local districts in selecting instructional materials aligned with these standards.

Note that the copyright of the *Common Core State Standards for Mathematics* is held by the National Governors Association Center for Best Practices and the Council of Chief State School Officers (collectively, NGA Center/CCSSO). This use of the CCSS for Mathematics is done under the CCSS Terms of Use, available at www.corestandards.org/terms-of-use. Specifically, this work is done under the Terms of Use "non-exclusive, royalty-free license to copy, publish, distribute, and display the Common Core State Standards for non-commercial purposes that support the Common Core State Standards Initiative." For a complete copy of the *Common Core State Standards for Mathematics* as well as the *CCSS for Mathematics, Appendix A: Designing high school mathematics courses based on the Common Core State Standards,* go to **www.corestandards.org/the-standards**.

October 2010 release.

We welcome your comments and suggestions for improvements—please send to **dana-txshop@utlists.utexas.edu** or the address in the copyright section above.

About the Charles A. Dana Center at The University of Texas at Austin

The Dana Center works to raise student achievement in K–16 mathematics and science, especially for historically underserved populations. We do so by providing direct service to school districts and institutions of higher education; to local, state, and national education leaders; and to agencies, nonprofits, and professional organizations concerned with strengthening American education.

The Center was founded in 1991 at The University of Texas at Austin. We carry out our work by supporting high standards and building system capacity; collaborating with key state and national organizations to address emerging issues; creating and delivering professional supports for educators and education leaders; and writing and publishing education resources, including student supports. Our staff of more than 60 has worked with dozens of school systems in nearly 20 states and with 90 percent of Texas's more than 1,000 school districts. We are committed to ensuring that the accident of where a child attends school does not limit the academic opportunities he or she can pursue.

For more information about our programs and resources, see our homepage at **www.utdanacenter.org.** To access our resources (many of them free), see our products index at **www.utdanacenter.org/products.** And to learn more about our professional development—and sign up online—go to **www.utdanacenter.org/pd**.

[*] For the high school course sequences, we relied on the *Common Core State Standards Mathematics Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards*, developed for the CCSS initiative by Achieve, Inc., which convened and managed the Achieve Pathways Group.

Acknowledgments

Unless otherwise noted, all staff listed here are affiliated with the Dana Center.

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Our thanks

We gratefully acknowledge the more than 100 school districts and thousands of educators who have informed the development of these resources.

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Introduction

Phase 1: Studying the Standards

Phase 2: Narrowing the Field of Instructional Materials

Phase 3: Assessing Mathematical Content Alignment

The purpose of Phase 3: Assessing Mathematical Content Alignment is to determine the degree to which the materials are aligned to the standards (content and processes). In Phase 3, participants conduct an in-depth review of the 2-3 instructional materials selected in Phase 2. The Phase 3 process requires selection committee members to use set criteria in order to determine a rating for each sample, to cite examples to justify their score for each sample, and to document standards that are missing or not well-developed in the instructional materials examined.

Implementation

As a whole group, selection committee members should practice applying the Phase 3 rubric. The purpose of the whole group practice is to promote inter-rater reliability and calibration.

In Phase 3 it is not important to analyze every page, section, or chapter of a resource. It is important to identify an area, topic, or big idea for the deep content analysis of Phase 3 (e.g. development of equivalent fractions, addition of whole numbers, development of proportionality…). The identified area, topic, or big idea will be used for all the instructional materials considered in Phase 3. The area, topic, or big idea can be identified through the use of student achievement data, curriculum priorities/challenges, or ideas that typically make up a greater portion of instruction in particular grade levels/courses. In most cases, Phase 3 will identify the one resource that is best aligned.

Step-by-Step Instructions

1. Use your current adoption to practice using the Phase 3 rubric. Select one big idea to focus your analysis (see note above for selecting the area, topic, or big idea).
2. Independently, committee members use their current resource, the identified big idea (and associated pages in that resource), and the Phase 3 rubric to score and document the extent to which the material (content and processes) aligns to the standards.
3. In small groups, committee members share their scoring and justifications. Small groups come to consensus on how the current resource would score on this big idea.
4. Each small group shares with the large group their score. Repeat the consensus building to generate a large group score on this big idea.
5. Clarify any misunderstandings about how to apply the rubric before committee members begin to use Phase 3 rubric on the selected materials.

6. Based on the size of the selection committee, determine the number of areas, topics, or big ideas to be examined for each grade/course. If the group size is large, more areas, topics, big ideas can be examined within each grade level/course.
7. Make sure committee members have multiple copies of the Phase 3 rubric.
8. Committee members apply the Phase 3 rubric for each of the materials.
9. Establish a time line for groups to complete and submit Phase 3 documentation.
10. Establish a data collection and analysis process to attain a rating for each resource.

Materials and Supplies

- Phase 3: Assessing Mathematical Content Alignment black line master — multiple copies per person
- Currently used instructional resource
- The 2 to 4 instructional materials selected in Phase 2

Phase 4: Assessing Vertical Alignment of Instructional Materials

Important Mathematical Ideas:
Understanding the scoring

	Superficially Developed	Well Developed
Development	1 2 Important mathematical ideas are alluded to simply or are missing, approached primarily from a skill level, or provided for students outside any context.	3 4 Important mathematical ideas are evident, conceptually developed, and emerge within the context of real-world examples, interesting problems, application situations, or student investigations.
Connections	1 2 Important mathematical ideas are developed independently of each other (i.e., they are discrete, independent ideas).	3 4 Important mathematical ideas are developed by expanding and connecting to other important mathematical ideas in such a way as to build understanding of mathematics as a unified whole.
Rigor and Depth	1 2 Important mathematical ideas are applied in routine problems or in using formulated procedures, and are extended in separate / optional problems.	3 4 Important mathematical ideas are applied and extended in novel situations or embedded in the content, requiring the extension of important mathematical ideas and the use of multiple approaches.

Skills and Procedures:
Understanding the scoring

	Superficially Developed	Well Developed
	1 2 3 4	
Development	Skills and procedures are the primary focus, are developed without conceptual understanding, and are loosely connected to important mathematical ideas — important mathematical ideas are adjunct.	Skills and procedures are integrated with important mathematical ideas and are presented as important tools in applying and understanding important mathematical ideas.
	1 2 3 4	
Connections	Skills and procedures are treated as discrete skills rarely connected to important mathematical ideas or other skills and procedures.	Skills and procedures are integrated with—and consistently connected to—important mathematical ideas and other skills and procedures.
	1 2 3 4	
Rigor and Depth	Skills and procedures are practiced without conceptual understanding outside any context, do not require the use of important mathematical ideas, and are primarily practiced in rote exercises and drill.	Skills and procedures are critical to the application and understanding of important mathematical ideas, and are embedded in problem situations.

Mathematical Relationships: Understanding the scoring

	Superficially Developed (1 — 2 — 3 — 4) Well Developed	
Development	Mathematical relationships are not evident, and mathematics appears as a series of discrete skills and ideas.	Mathematical relationships are evident in such a way as to build understanding of mathematics as a unified whole.
Connections	Mathematical relationships are not required of students or are used primarily to provide a context for the practice of skills or procedures — words wrapped around drill.	Mathematical relationships are integrated with important mathematical ideas, and are integral in required activities, problems, and applications.
Rigor and Depth	Mathematical relationships require the use of skills and procedures, but rarely require the use of any important mathematical ideas or connections outside mathematics.	Mathematical relationships require the broad use of mathematics and integrate the need for important mathematical ideas, skills, and procedures, as well as connections outside mathematics.

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), section(s), or page(s) reviewed.

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Overall Rating

1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

Documenting Alignment to the Standards for Mathematical Practice

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), section(s), or page(s) reviewed.

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Overall Rating

1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

Documenting Alignment to the Standards for Mathematical Practice

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

Documenting Alignment to the Standards for Mathematical Practice

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

Documenting Alignment to the Standards for Mathematical Practice

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y – 2)/(x – 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x – 1)(x + 1)$, $(x – 1)(x^2 + x + 1)$, and $(x – 1)(x^3 + x2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating

1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – OPERATIONS AND ALGEBRAIC THINKING – 5.OA

Write and interpret numerical expressions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – OPERATIONS AND ALGEBRAIC THINKING – 5.OA

<table>
<tr><th>Write and interpret numerical expressions.</th><th>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</th></tr>
<tr><td rowspan="3">5.OA.2

Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.

Indicate the chapter(s), section(s), and/or page(s) reviewed.</td><td>Important Mathematical Ideas 1 2 3 4

Skills and Procedures 1 2 3 4

Mathematical Relationships 1 2 3 4

Summary / Justification / Evidence</td></tr>
<tr><td>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</td></tr>
<tr><td>Overall Rating 1 2 3 4</td></tr>
</table>

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – OPERATIONS AND ALGEBRAIC THINKING – 5.OA

Analyze patterns and relationships.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.* **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Understand the place value system.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Understand the place value system.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Understand the place value system.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NBT.3a 3. Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000). **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Understand the place value system.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NBT.3b 3. Read, write, and compare decimals to thousandths. b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Understand the place value system.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NBT.4 Use place value understanding to round decimals to any place. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Perform operations with multi-digit whole numbers and with decimals to hundredths.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Perform operations with multi-digit whole numbers and with decimals to hundredths.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS IN BASE TEN – 5.NBT

Perform operations with multi-digit whole numbers and with decimals to hundredths.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS–FRACTIONS – 5.NF

Use equivalent fractions as a strategy to add and subtract fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)* **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS–FRACTIONS – 5.NF

Use equivalent fractions as a strategy to add and subtract fractions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.* **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS–FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?* **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
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Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.4a 4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product (*a*/*b*) × *q* as *a* parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations *a* × *q* ÷ *b*. *For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = ac/bd.)* **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.4b 4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.5a 5. Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.5b 5. Interpret multiplication as scaling (resizing), by: b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
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Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.6 *Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.* **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.7a 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.[1] a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3.* 1 Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.7b 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.[1] b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.* 1 Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – NUMBER AND OPERATIONS – FRACTIONS – 5.NF

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.NF.7c 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.[1] c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?* 1 Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

Convert like measurement units within a given measurement system.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

<table>
<tr><td>Represent and interpret data.</td><td>Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</td></tr>
<tr><td rowspan="3">5.MD.2
Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

Indicate the chapter(s), section(s), and/or page(s) reviewed.</td><td>Important Mathematical Ideas 1 2 3 4

Skills and Procedures 1 2 3 4

Mathematical Relationships 1 2 3 4

Summary / Justification / Evidence</td></tr>
<tr><td>Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</td></tr>
<tr><td>Overall Rating 1 2 3 4</td></tr>
</table>

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.MD.3a 3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________________

Title of Instructional Materials: ______________________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.MD.3b 3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. b. A solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
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Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.MD.5a 5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
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Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.MD.5b 5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – MEASUREMENT AND DATA – 5.MD

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.MD.5c 5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** Overall Rating 1 2 3 4

Reviewed By: ____________________

Title of Instructional Materials: ____________________

MATHEMATICS: GRADE 5 – GEOMETRY – 5.G

Graph points on the coordinate plane to solve real-world and mathematical problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – GEOMETRY – 5.G

Graph points on the coordinate plane to solve real-world and mathematical problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ______________________

Title of Instructional Materials: ______________________

MATHEMATICS: GRADE 5 – GEOMETRY – 5.G

Classify two-dimensional figures into categories based on their properties.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.* **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Reviewed By: ________________________

Title of Instructional Materials: ________________________

MATHEMATICS: GRADE 5 – GEOMETRY – 5.G

Classify two-dimensional figures into categories based on their properties.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5.G.4 Classify two-dimensional figures in a hierarchy based on properties. **Indicate the chapter(s), section(s), and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary / Justification / Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4